

Date: Monday, 12/10/2007 12:04:42 PM  
User: Kim Johnston

# Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : ROUND BILLET, ALUMINUM
Job Number : 36236	
Estimate Number : 12286	
P.O. Number :	Part Number : D6103003
This Issue : 12/10/2007 S.O. No. :	Drawing Number : D6103 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : PURCHASED PARTS	Drawing Revision : B
Previous Run : 35953	Material :
Written By :	Due Date : 12/21/2007 Qty: 40 Um: Each
Checked & Approved By : <u>1207.12.10</u>	
Comment : Est Rev: A New Issue 06-02-09 JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	PG	PURCHASING
-----	----	------------



Comment: PURCHASING

Issue P/O: 5255

C 1207/12/11

a) Description: Alluminum round billet

b) Ø3.500" x 12.500" long

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Material: 7075-T7351 (QQ-A-225/9)

Material certification required

(40)

2.0	D6103003P	round alum billet
-----	-----------	-------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 40.0000 Each(s)  
alum billet

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

PC 8/10/04

(44)

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK

12/10/07 (44)

5.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CNC

12/10/07 (44)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 12/10/2007 12:04:42 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ROUND BILLET, ALUMINUM

Job Number: 36236

Part Number: D6103003

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



*08/04/06 TJ*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*4-08-06*  
*MF 08-04-16*

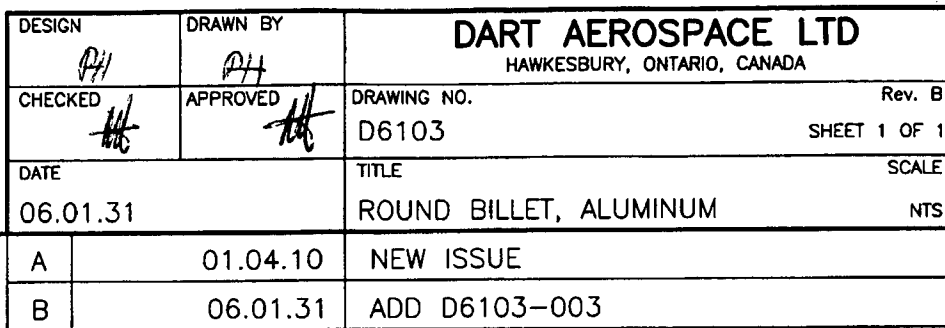
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

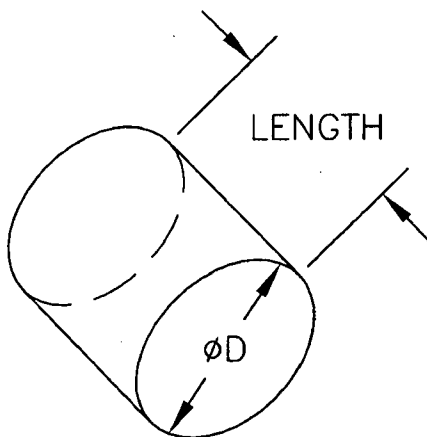
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED  
06.02.07



ALL DIMENSIONS ARE IN INCHES.

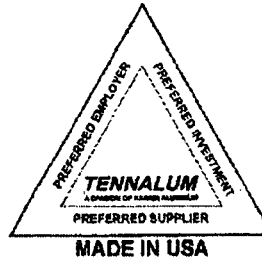
Part No.	Alloy	D (Diameter)	Length
D6103-001	7075-T6/T651 (QQ-A-200/11 OR QQ-A-225/9)	Ø3.250	12.50
D6103-003	7075-T7351 (QQ-A-225/9)	Ø3.500	12.50

SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 36236

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

# KAISER ALUMINUM FABRICATED PRODUCTS

Tennalum  
PO Box 669  
Jackson, TN 38302  
731-423-2811



**CERTIFIED TEST REPORT**  
<http://www.KaiserAluminum.com>

CUSTOMER PO NUMBER: 01-41355		CUSTOMER PART NUMBER: 3808		PRODUCT DESCRIPTION: Cold Finished Round	
KAISER ORDER NUMBER: 636713	LINE ITEM: 1	SHIP DATE: 12/10/2007	ALLOY: 7075	TEMPER: T7351	
WEIGHT SHIPPED: 1122 lbs.	QUANTITY: 8 PCS.	B/L NUMBER: 27145	DIAM/DAF/THKNS: 3.500 in.	WIDTH: 0.000 in.	LENGTH: 144.0 in.
SHIP TO: A M Castle & Co 3400 No. Wolf Road Franklin Park, IL 60131 USA			SOLD TO: A M Castle & Co 3400 No. Wolf Road Franklin Park, IL 60131 USA		

Test Code: 1000 AC

## Actual Physical Properties

Lot Number	LONG. UTS ksi	LONG. YTS ksi	LONG. ELONG. %	COND % IACS
20098537	70.1	58.4	14.0	38.9

## Chemical Composition, WT. % (Aluminum Remainder)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OTHERS EACH	OTHERS TOTAL	Lot
Actual	0.15	0.27	1.1	0.06	2.7	0.20	5.9	0.02			20098537
Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Min			1.0		2.1	0.18	5.1				

## Specifications

Standard: ISO 9001, ASTM B211-03, AMS 4124D, AMS-QQ-A-225/9 Non-Standard: A97075-11-9

**CASTLE METALS CORP.**  
DATE RCVD 12/11/07  
IAC 8808  
APPROVED BY [Signature]

## CERTIFICATION

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

*John Rennekamp*

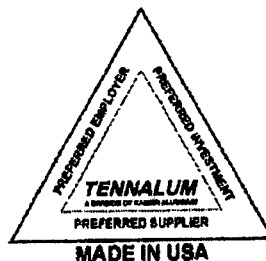
Plant Serial: 98605

Kaiser Order Number: 636713

Line Item: 1

**KAISER  
ALUMINUM  
FABRICATED PRODUCTS**

Tennalum  
PO Box 669  
Jackson, TN 38302  
731-423-2811



**CERTIFIED TEST REPORT**  
<http://www.KaiserAluminum.com>

**Miscellaneous Notes**

Made in USA

This material was melted and manufactured in the USA. Mercury is not a normal contaminant in aluminum alloys. Neither mercury nor any of its compounds were utilized by Kaiser Aluminum in the manufacture of this material. AS9100B:2004 This material meets the requirements of (cold finished) T73 temper and QQ-A-225/9E (CANCELLED). NAFTA - YES.

**CERTIFICATION**

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

Plant Serial: 98605

Kaiser Order Number: 636713

Line Item: 1

